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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,180	11/12/2003	Georg Scholz	DKT02151	6126

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EXAMINER

VERDIER, CHRISTOPHER M

ART UNIT PAPER NUMBER

3745

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,180

Applicant(s)

SCHOLZ ET AL.

Examiner

Christopher Verdier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 8, 9, 12-15 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 5, 7, 10, 11, 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Receipt and entry of Applicant's Preliminary Amendment dated November 12, 2003 is acknowledged.

Specification

The abstract of the disclosure is objected to because in line 15, the legal term "said" should be deleted, and because in line 18, -- an -- should be inserted after "in". Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: Appropriate correction is required.

In paragraph 1, line 3, -- having -- should be inserted after "type".

In paragraph 6, line 6, -- an -- should be inserted after "in".

In paragraph 8, line 6, -- a -- should be inserted after "in".

In paragraph 16, line 6, "point" should be changed to -- points --.

In paragraph 16, line 7, -- a -- should be inserted after "in".

In paragraph 17, line 3, -- they are -- should be inserted after "because".

In paragraph 17, line 4, -- of -- should be inserted after "each".

In paragraph 25, line 11, -- a -- should be inserted after "in".

In paragraph 26, line 3, "in" should be changed to -- is --.

In paragraph 29, line 8, "plain" should be changed to -- plane --.

In paragraph 32, line 6, "plains" should be changed to -- planes --.

In paragraph 33, line 2, "plain" should be changed to -- plane --.

In paragraph 35, line 7, "0, 547%" should be changed to -- 0.547% --.

Examiner's Suggestions to Claim Language

The following are suggestions to improve the clarity and precision of the claims:

In claim 4, line 5, -- said -- may be inserted before "opening".

In claim 5, line 7, -- a -- may be inserted before "bending".

In claim 9, line 1, -- said -- may be inserted before "drag".

Claim Objections

Claims 7 and 15-16 are objected to because of the following informalities: Appropriate correction is required.

In claim 7, lines 4-5, "is provided surface" should be changed to -- surface is provided --.

In claim 15, line 2, "which" should be deleted.

Claim 14 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form. Claim 14 depends from claim 12, yet is identical to claim 12.

Claim Rejections - 35 USC § 112

Claims 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as

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the invention. Claims 12, 13, and 14, line 1, recite "said angle (γ)". However, limitations in parentheses are not accorded any weight. Therefore, "said angle" is unclear if this refers to the bending angle, or the angle between the longitudinal axes of the bent sections of the drag lever.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4, 8, and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by French Patent 1,442,174. Note the guiding grid of variable geometry comprising a plurality of guiding vanes 9 arranged around a central axis 1, each vane being pivotal about a pivoting axis near 10, a nozzle ring 5 for supporting the vanes and their pivoting axes around the central axis, a unison ring 19 which is pivotable around the central axis relative to the nozzle ring, and a transmission mechanism by which the unison ring is connected to the vanes for pivoting the vanes about their respective pivoting axes, having a first transmission element 27 with an opening 28 in which a second transmission 16 element is slidably guided, wherein the second transmission element 16 is a drag lever which is pivotably guided on an associated ring 5, 19, and in that the drag lever 16 immerses into the opening 28 of the first transmission element 27 in an approximately radial direction. The drag lever is articulated on the unison ring via elements 26, 27. The drag lever abuts, essentially in all its positions, on the entire length of the inner

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surface of the opening. As seen in figure 1, a longitudinal axis of each drag lever forms an angle with a radial plane when the vanes are closed, the angle being not equal to 0 degrees, and being about 18 degrees. Note that claims 8 and 17-19 do not require that the vanes be fully closed, and read on the vanes being partially closed as disclosed by the French Patent.

Claims 1-4, 6, 8, 15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Hanselmann 3,146,626. Note the guiding grid of variable geometry comprising a plurality of guiding vanes 2 arranged around an unnumbered central axis, each vane being pivotal about an unnumbered pivoting axis, a nozzle ring 11 for supporting the vanes and their pivoting axes around the central axis, a unison ring 18 which is pivotable around the central axis relative to the nozzle ring, and a transmission mechanism by which the unison ring is connected to the vanes for pivoting the vanes about their respective pivoting axes, having a first transmission element 3 with an opening 29 in which a second transmission 5 element is slidably guided, wherein the second transmission element 5 is a drag lever which is pivotably guided on an associated ring 11, 18, and in that the drag lever 5 immerses into the opening 29 of the first transmission element 3 in an approximately radial direction. The drag lever is articulated on the unison ring via element 8. The drag lever has a corned cross section as seen in figures 1 and 2. The drag lever abuts, essentially in all its positions, on the entire length of the inner surface of the opening. The opening 29 of the first transmission element is a groove, with the groove facing away from the vanes. Any arbitrary radial plane may be drawn, such that a longitudinal axis of each drag lever would form an angle with a radial plane when the vanes are closed, the angle being not equal to 0 degrees.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanselmann 3,146,626. Hanselmann discloses a guiding grid of variable geometry substantially as claimed as set forth above, including a drag lever 5 with a cornered rectangular cross section. However, Hanselmann does not disclose that the cross section is generally a square.

The recitation of the cross section of the drag lever being generally a square is deemed to be matter of choice in design. It would have been obvious at the time the invention was made to

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a person having ordinary skill in the art to select a square shape for the cross section of the drag lever of Hanselmann as an obvious engineering expedient, as opposed to the rectangular cross section disclosed by Hanselmann, because a square cross section and a rectangular cross section are so similar in shape that it would appear the drag lever would perform substantially equally as well with a square shaped cross section as opposed to a rectangular shaped cross section.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mitsubori (figures 1-2) is cited to show a variable geometry vane assembly having a unison ring 13 and guide levers 10.

Ertl is cited to show a guide vane adjusting device having a nozzle ring, a unison ring, and levers received in recesses of the unison ring.

Allowable Subject Matter

Claims 5, 7, 10-11, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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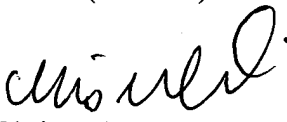
Claims 12-13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (571) 272-4824. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.V
January 9, 2005


Christopher Verdier
Primary Examiner
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